

REMARKS

The Office Action dated March 1, 2005, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-5, 9, 15, 21, 31 and 41 are amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added and no further consideration and/or search is required. Thus, claims 1-41 are pending in the present application and are respectfully submitted for consideration.

Claims 1-20 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The Office Action alleged that the feature "status information" recited in claim 1 is unclear. Applicants amend independent claim 1 to be consistent with independent claim 21. Thus, applicants submit that claim 1 complies with 35 U.S.C. § 112, second paragraph. Applicants respectfully request that the indefiniteness rejection be withdrawn.

Claims 1-14 and 21-41 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,541,927 (*Kristol et al.*) in view of U.S. Patent No. 5,774,607 (*Montulli*). The Office Action took the position that *Kristol* teaches all the elements of the pending claims except that the server pushing status information to a client. The Office Action then took the position that *Montulli* provides the elements of claims 1-14 and 21-41 missing from *Kristol*. Applicants submit that the cited references,

either alone or in combination, do not disclose or suggest all the features of any of the pending claims.

Claim 1, upon which claims 2-14 and 41 are dependent, recites a network hub in a communication network. The network hub includes a server. The server pushes status information to a client without a request for the status information from the client. The status information includes network information.

Claim 21, upon which claims 22-30 are dependent, recites a communication apparatus. The communication apparatus includes a network information table storing network information from the network information receiver. The communication apparatus also includes a network information transmitter selectively push transmitting the network information in the network information table without a request for the network information.

Claim 31, upon which claims 32-40 are dependent, recites a communication apparatus. The communication apparatus includes a network information receiver, operably coupled with a communication network, for receiving network information. The communication apparatus also includes a network information table for storing network information from the network information receiver. The communication apparatus also includes a network operations detector detecting the network information and producing operational information of an operational state of the network. The communication apparatus also includes a network information transmitter, for

transmitting the operational information of an operational state of the network without a request for the operational information.

As discussed in the specification, examples of the present invention enable the server to push information to a client, and a network information transmitter to selectively push transmit the network information or the operational information of an operational state of the network. Push technology may transmit information to a client, or data recipient, without a specific request for that information from the client. Thus, a network hub in a network may act as a server to network clients to push, or transmit, information. Applicants respectfully submit that the cited references, either alone or in combination, fail to disclose or suggest all the elements of any of the presently pending claims. Therefore, applicants submit the cited references fail to provide the critical and unobvious advantages discussed above.

Kristol relates to a method of multicasting. *Kristol* describes transmitting information from a source to each destination in a set of destinations along a global multicast tree. *Kristol* addresses consolidating status and acknowledgement information from the destinations. Referring to Figure 5 of *Kristol*, source S multicasts packets to all destinations and each designated destination sends its status to source S so that source S can re-multicast a packet to those destinations that did not receive the packet. Thus, the flow of information is to the source from the destinations.

Montulli relates to a persistent client state in a hypertext transfer protocol based client-server system. *Montulli* describes an HTTP client that requests a file, such as an

HTML document on an HTTP server. The HTTP server transmits the file to the client. In addition, the HTTP server transmits a state object that describes certain state information to the HTTP client. The HTTP client stores the state object and sends the state object back to the HTTP server when making later requests for files. The state object is transmitted from the HTTP client to a server only when the HTTP client makes an HTTP request to the server and the server is within a domain. *Montulli* also describes the server sending a piece of state information that the client system stores when the server responds to an HTTP request by returning an object to a client. The client, in turn, sends the current value of the state object to the server when future requests are sent.

Applicants submit that the feature of pushing status or operational information to a client without a request for the information is not disclosed or suggested by the cited references. The Office Action acknowledges that *Kristol* does not “explicitly disclose the server pushing status information to a client.” Referring to *Montulli*, the server sends a state object after a request is received from a client. The client of *Montulli* then forwards updated state object information to the server. The server of *Montulli* only sends the state object in response to a request and does not push the state object to the client without the request. Thus, *Montulli* does not disclose or suggest pushing information to a client without a request for the information. Further, *Montulli* does not disclose or suggest a network information transmitter selectively push transmitting network information in a network information table without a request. Applicants submit that *Montulli* describes that any transmission reception of the state object is dependent upon the client requesting

a document from the server. This aspect of *Montulli* does not disclose or suggest a server pushing information without a request for the information.

In contrast, claim 1 recites "the server pushing status information to a client without a request for the status information from the client." Claim 21 recites "a network information transmitter selectively push transmitting the network information in the network information table without a request for the network information." Claim 31 recites "a network information transmitter, transmitting the operational information of an operational state of the network without a request for the operational information." Applicants submit that the cited references do not disclose or suggest at least these features of the pending claims.

Thus, for at least these reasons, applicants submit that claims 1, 21 and 31 are not disclosed or suggested by *Kristol* and *Montulli*, either alone or in combination. Further, claims 2-14, 22-30 and 32-41 are allowable for at least their dependence on the independent claims and because they include additional patentable features. Applicants respectfully request that the obviousness rejection of claims 1-14 and 21-41 be withdrawn.

Claims 15-20 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Kristol* in view of *Montulli*, and further in view of U.S. Patent No. 5,651,006 (*Fujino et al.*) The Office Action took the position that neither *Kristol* nor *Montulli* teaches that the information is a management information based statistic. The Office Action then took the position that *Fujino* teaches those features missing from

Kristol and Montulli. Applicants submit that the cited references, either alone or in combination, do not disclose or suggest all the features of any of the presently pending claims.

Claim 15, upon which claim 19 is dependent, depends directly from claim 1. Claim 1 is summarized above. Applicants submit that claim 15 recites the features of claim 1, as well the feature that the status information comprises a management information base statistic.

Claim 16, upon which claims 17 and 18 are dependent, depends directly from claim 1. Claim 1 is summarized above. Applicants submit that claim 16 recites the features of claim 1, as well as the feature of the network hub including a MIB engine.

Claim 20 depends indirectly from claim 1, and also includes the features of claim 1, as well as the feature of the network hub including a MIB engine for pushing the predefined status field.

Fujino relates to a hierarchical network management system. *Fujino* describes a system that is structured by a plurality of agents and sub-managers connected to lower communication networks and an integration manager connected to a higher communication network. The sub-managers function as agents to the integration manager and as a manager to each agent. *Fujino* describes a simple network management protocol between each agent and its sub-manager and between a sub-manager and integration manager.

As with *Kristol* and *Montulli*, applicants submit that *Fujino* does not disclose or suggest the server pushing status information to client without a request for the information from the client. The collected information of *Fujino* is not pushed to a client by a server. Instead, *Fujino* describes collected information being held in a format which is set by a plurality of management objects expressed in a tree structure and is accessed at a reference request from the integration manager to post to the integration manager. *Fujino* does not disclose or suggest a server pushing status information to a client without a request from the client. Thus, *Fujino* does not disclose or suggest those features of the claims missing from *Kristol* and *Montulli*.

Further, claims 15-20 depend directly or indirectly from independent claim 1. As discussed above, claim 1 is not rendered obvious by the cited references, either alone or in combination. If an independent claim is nonobvious, then any claim depending therefrom also is nonobvious. MPEP 2143.03. Because claim 1 is nonobvious, applicants submit claims 15-20 are also nonobvious.

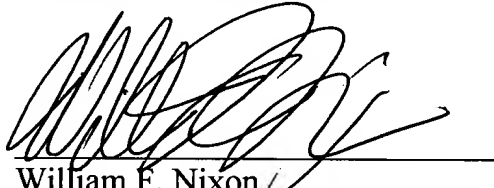
For at least these reasons, applicants submit that claims 15-20 are not disclosed or suggested by the cited references, either alone or in combination, and respectfully request that the obviousness rejection of these claims be withdrawn.

Thus, applicants respectfully submit that each of claims 1-41 recite subject matter that is neither disclosed nor suggested by the cited references. Applicants therefore respectfully request that all of claims 1-41 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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